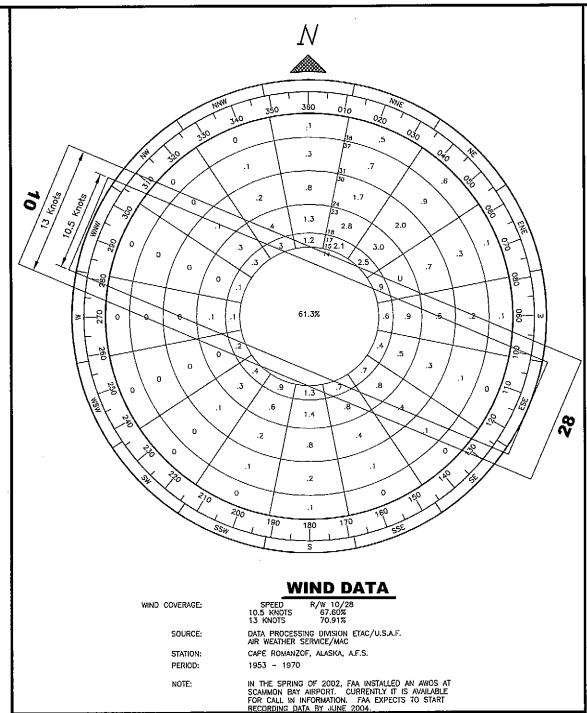


VICINITY MAP

T 20, R 89 W, SEC. 3,10, & 11 SEWARD MERIDIAN U.S.G.S. HOOPER BAY (D-2), ALASKA



NON-STANDARD CONDITIONS			
ПЕМ	EXISTING	STANDARD	ULTIMATE (B-II)
ULTIMATE R/W WIDTH (WIND COVERAGE)		75'	100'
			ļ

APPENDIX 2 OBSTRUCTION TABLE				
RUNWAY	OBSTRUCTION	SURFACE ELEVATION	OBSTRUCTION ELEVATION	DISPOSITION
				-

REVISIONS

RUNWAY DATA				
		RUNWAY	10/28	
ITEM		EXISTING	ULTIMATE	
EFFECTIVE GRADE		0.18%	0.18%	
% WIND COVERAGE	10.5 KNOTS	67.60%	67.60%	
	13 KNOTS	70.91%	70.91%	
	15 KNOTS		78.25%	
INSTRUMENT RUNWAY		NONE	NPI (10), VISUAL (28)	
RUNWAY SURFACE		GRAVEL	GRAVEL	
PAVEMENT STRENGTH		N/A	N/A	
APPROACH SURFACES		20:1	34:1 (10), 20:1 (28	
VISIBILITY MINIMUM		> 1 mile	1 mile	
RUNWAY LIGHTING		MIRL	MIRL	
RUNWAY MARKING		REFL. CONES	REFL. CONES	
RUNWAY NAVIGATION AIDS		NONE	PAPI, REIL	
RUNWAY TYPE		אדטוזע	>UTICITY	
AIRCRAFT APPROACH CATAGORY		Α	<u> </u>	
AIRCRAFT DESIGN GROUP			tI	
RUNWAY DIMENSION		75' x 3000'	100" × 4000"	
RUNWAY SAFETY AREA DIMENSION		150' x 3600'	150' x 4600'	
RUNWAY OBJECT FREE AREA DIMENSION		500' x 3600'	500' x 4600'	
RUNWAY OBSTACLE FREE ZONE DIMENSION		250' x 3400'	250' x 4400'	
RUNWAY PROTECTION ZONE DIMENSIONS	INNER	250'	500'	
	OUTER	450'	700'	
	LENGTH	1000	1000'	
GEODETIC POSITIONS (N.A.D. 83)	;			
THRESHOLD 10	LAT.	61'50'45.22" N	61*50'46.22" N	
		165'34'54.18" W		
THRESHOLD 28	LAT.	61'50'34.47" N	61'50'30.55" N	
11.11.100.11.00.10.00.00.00.00.00.00.00.		165 33 56.82" W		

TAXIWAY DATA		
ITEM	EXISTING	ULTIMATE
TAXIWAY WIDTH	35'	35'
TAXIWAY SAFETY AREA WIDTH	80'	80'
TAXIWAY OBJECT FREE AREA	131'	131'

AIRPORT DATA		
ITEM	EXISTING	ULTIMATE
AIRPORT ELEVATION (M.S.L.)	22.0*	22.0'
AIRPORT REFERENCE POINT (A.R.P.) LAT.	61°50'40.35" N	61'50'38.39" N
LONG.	165'34'25.50" W	165'34'15.94" W
TAXIWAY LIGHTING	MITL	MITL
RAMP LIGHTING	NONE	NONE
MEAN MAX. TEMPERATURE, HOTTEST MONTH (HOOPER BAY)	56'F	56'F
MAGNETIC DECLINATION, YEAR 13'46'E,200		E,2002
AIRPORT REFERENCE CODE	A-I)	8-11
AIRPORT AND TERMINAL NAVIGATION AIDS	NONE	NONE
AIRPORT NAVIGATION AIDS	ROT. BEACON	ROT. BEACON
AIRPURT NAVIGATION AIDS	GPS	GPS

LEGEND			
ITEM	EXISTING	ULTIMATE	
PROPERTY LINE			
BUILDING RESTRICTION LINE		- - '	
AIRPORT REFERENCE POINT (A.R.P.)	(A)	<u>(3)</u>	
WIND CONE AND SEGMENTED CIRCLE	*	(+)	
CONTOURS	100	100	
ROADWAYS			
BUILDINGS			
ROTATING BEACON	>• €	<u></u> 30€	
SHORELINE	حيبيت بتريت تريت بترجم	حيجت والتسايين المتعاجمة	
MONUMENT			
THRESHOLD LIGHTS	****	ಯರ	
FENCE	-x -x -x	_x—x—x—	

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BY:

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL

BY:

APPROVAL LETTER DATED

DATE:

FAA. AIRPORTS DIVISION

ALLEKAN REGION, AAL-601

F.A.A. AIRSPACE REVIEW NUMBER: 03—AAL—18NRA

BY DATE

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

CENTRAL REGION

CENTRAL REGION

APPROVED:

STEPHEN M. RYAN, P.F.

APPROVED:

APPROVED:

PARVEY M. DOUTHIT, B/E

PROJECT MANAGER

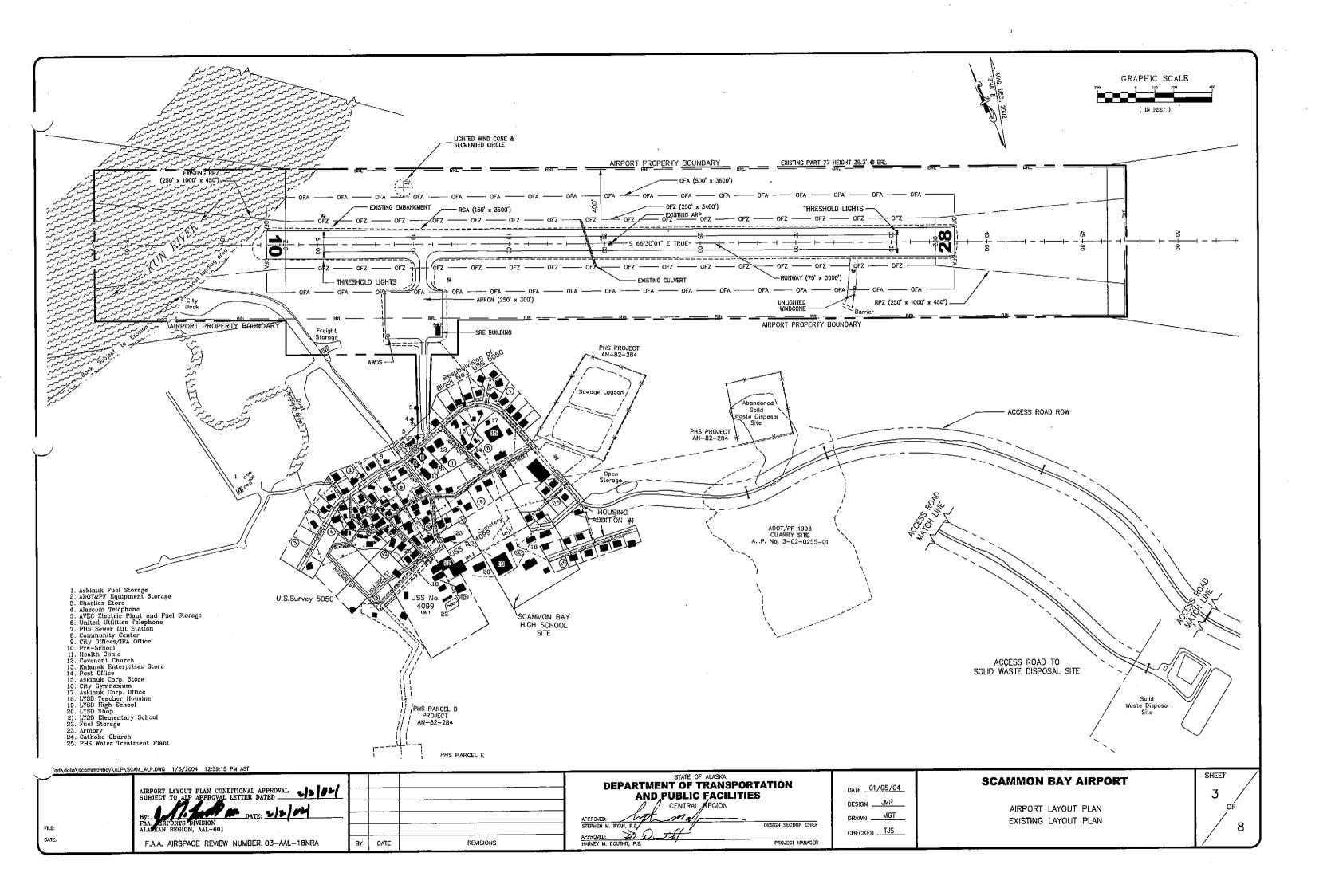
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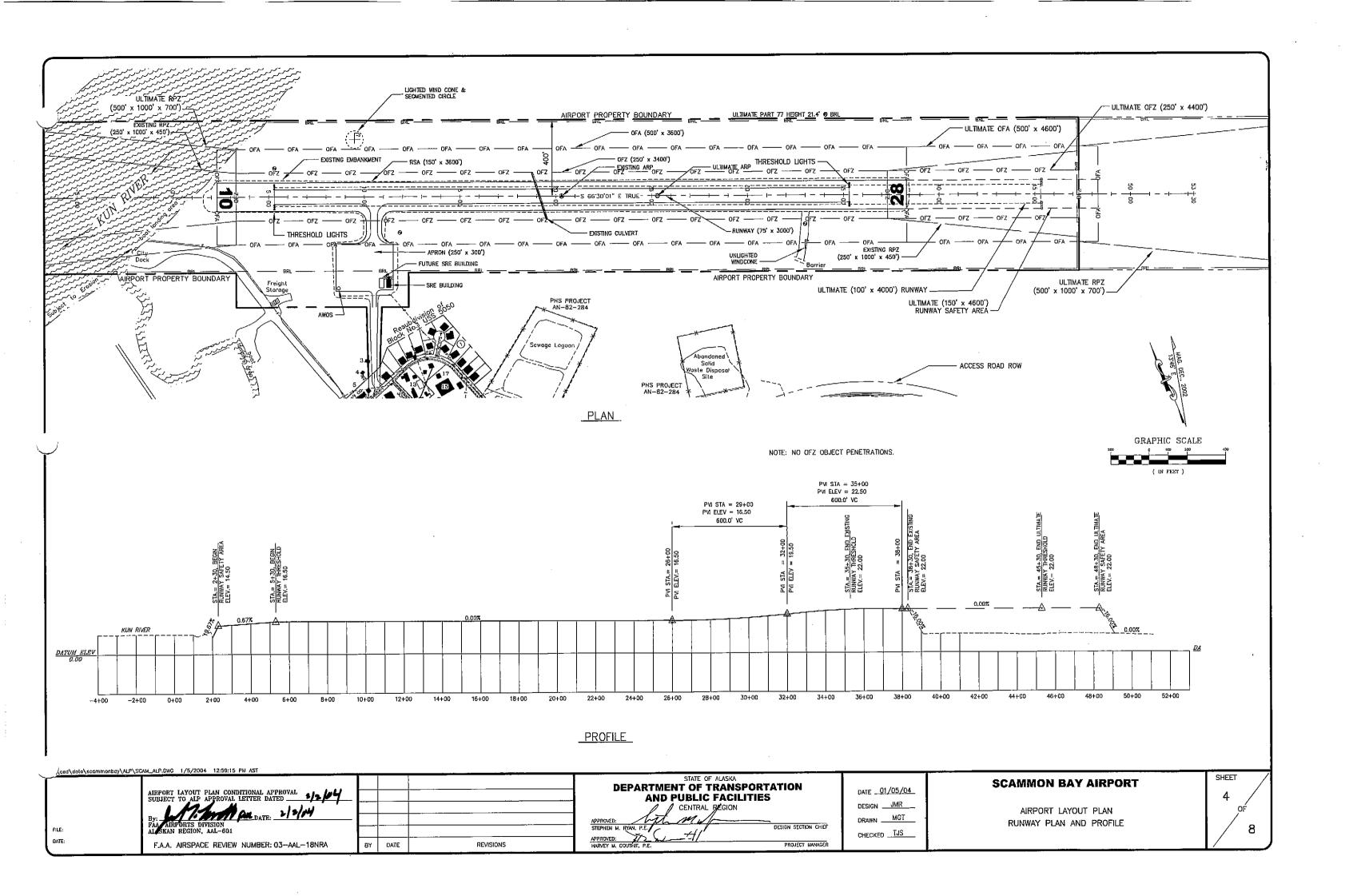
SCAMMON BAY AIRPORT

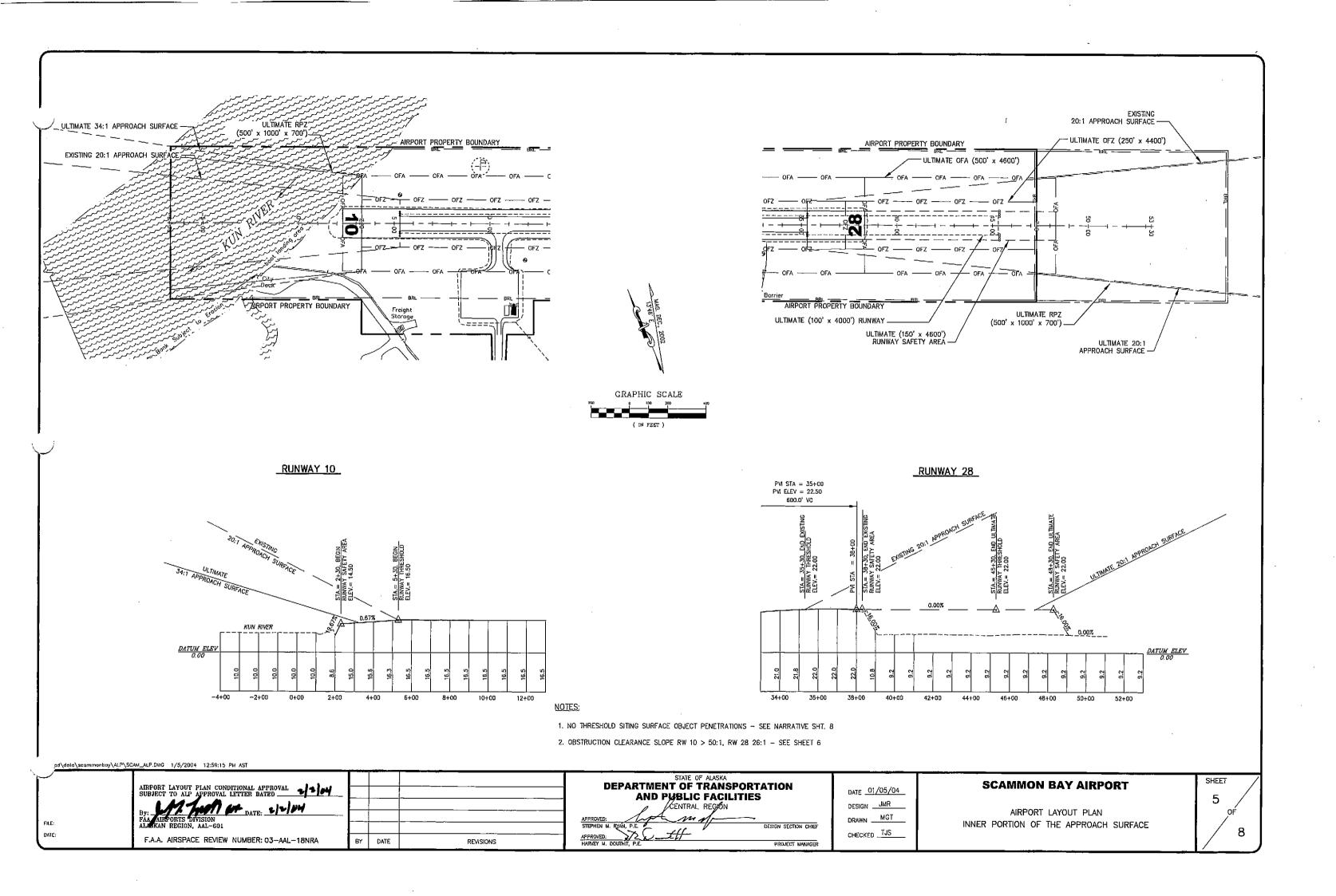
AIRPORT LAYOUT PLAN VICINITY MAP AND DATA TABLES SHEET

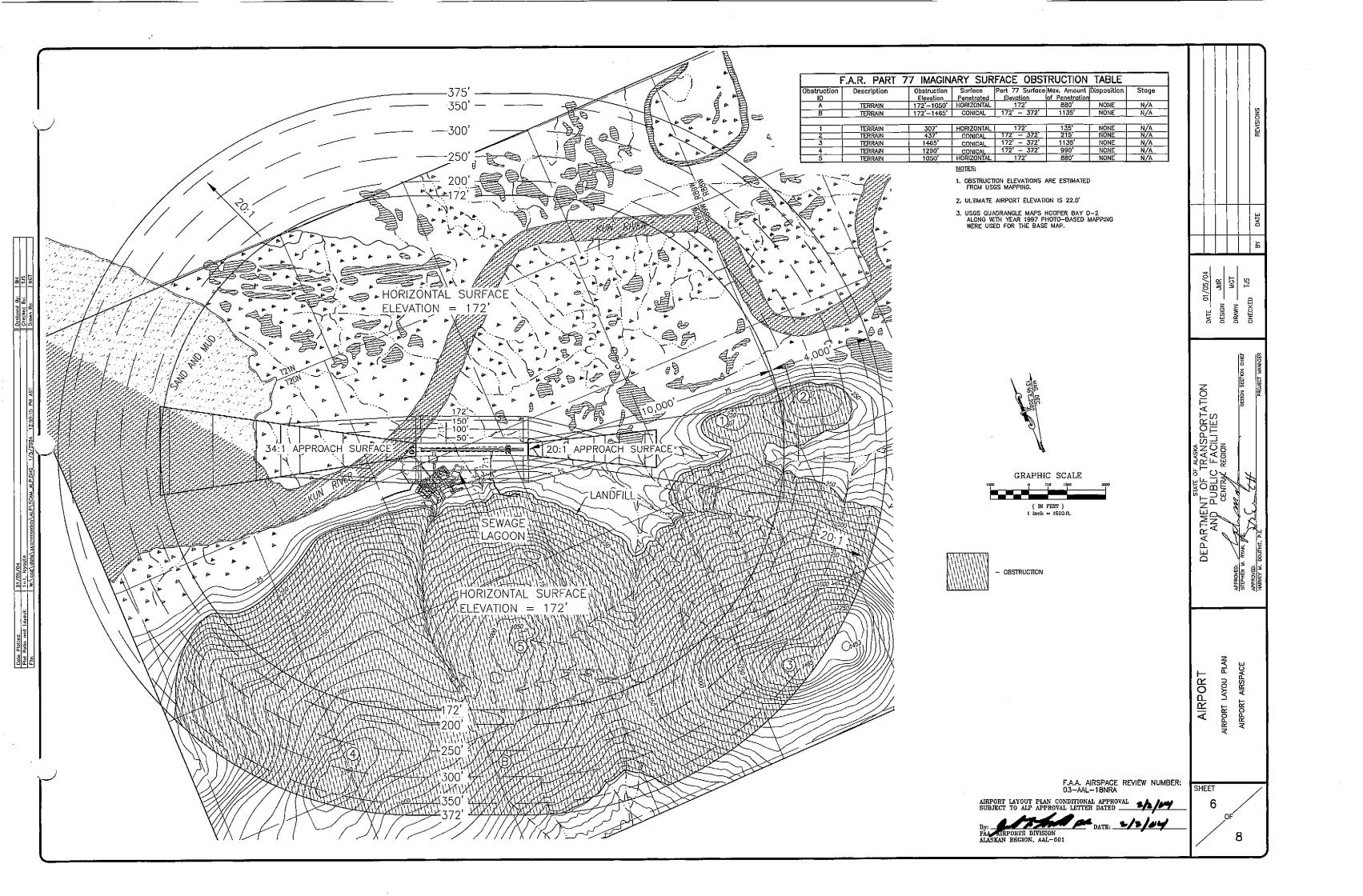
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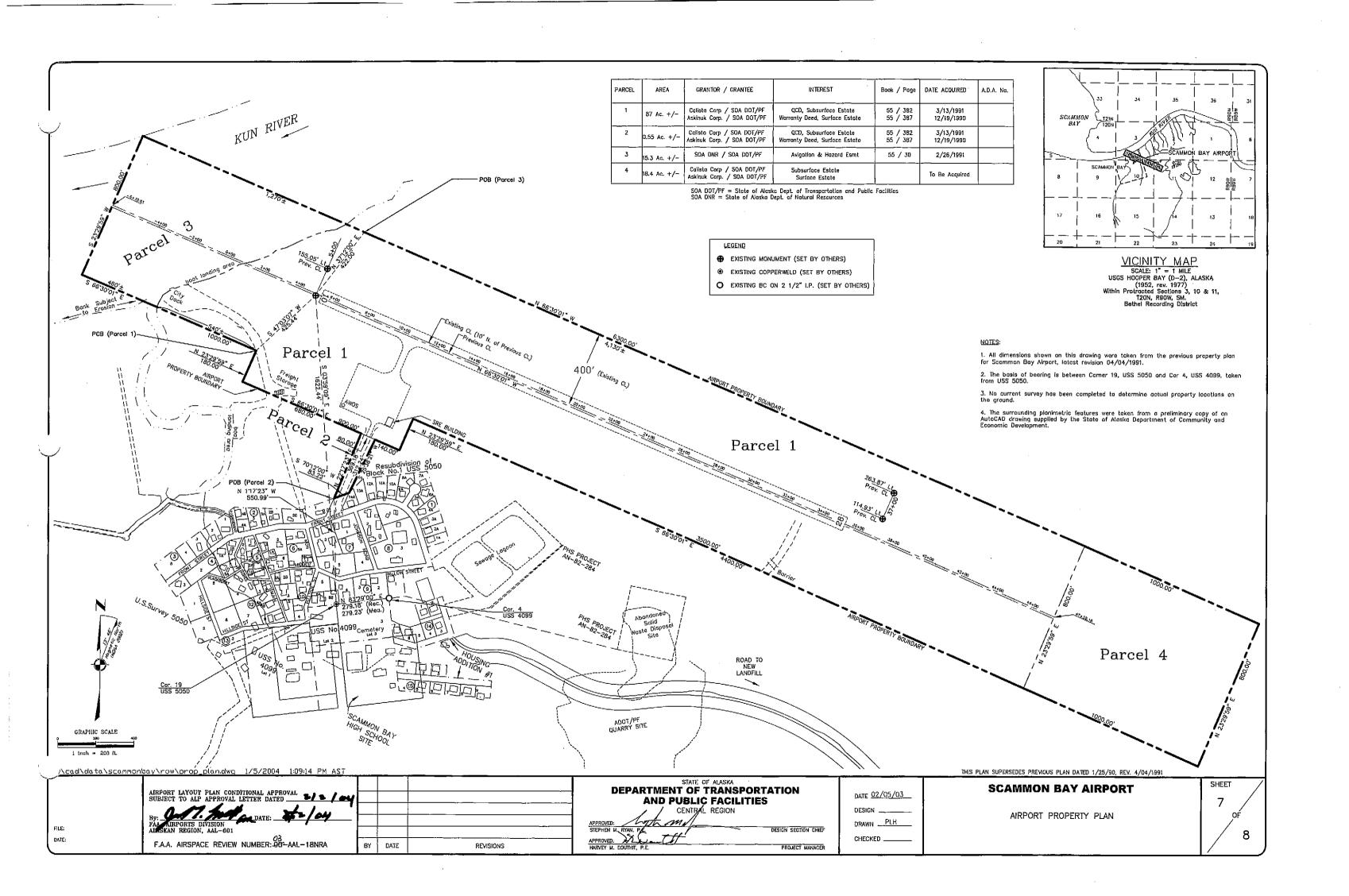
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A. Purpose

This narrative report is included with the Airport Layout Plan (ALP) for Scammon Bay in accordance with Federal Aviation Administration (FAA) Airport Design Advisory Circular (AC) 150/5300-13, Change 6, Appendix 7. The rationale for improvements to the Scammon Bay is autlined in this narrative report.

B. Introduction

This Airport Layout Plan supersedes the Scammon Bay ALP approved by the FAA on February 8, 1991.

Scammon Bay is located on the south bank of the Kun River, one mile from the Bering Sea. It lies to the North of the 2,300—foot Askinuk Mountains on the Yukon—Kuskokwim Delta. It lies approximately 61° 50° N Latitude, 165° 35° W Longitude (Sec. 10, 7020N, R090W, Seword Meridian). The cammunity is incorporated as a second class city with a mayor—council form of government.

The 2001 U.S. census documents a population of 465 persons at Scammon Bay.

Population History: 1940 88 1950 103 1960 226 1970 166 1980 250 1990 343 2000 465

Scammon Bay is a Yup'ik Eskimo community that relies on fishing and subsistence activities. Most residents travel to the Black River each summer for fish camp, 50 miles to the north. Employment is focused on commercial fishing. Fire fighting far BLM, construction projects and handicrafts also provide seasonal income. Subsistence activities provide fish, beluga whale, walrus, seal, birds and berries.

C. Airport Usage and Forecasts

The Alaska Aviation System Plan (AASP) has designated this airport as a Community Class Airport, which is defined as the primary access to a small rural community of at least 25 permanent year—round residents without reliable alternate year round access.

Since there is no tower at the Scammon Bay Airport, estimates of aircraft are based on the fleet of current users and current schedules and the Airport Moster Record (FAA Form 5010). The FAA Form 5010 reports the following data for annual operations:

Air Taxi	1,000
GA Local	0
GA Itinerant	300
Military	Ö
Total	1,300

The FAA reports 2,500 enplanements at Scammon Bay for 2001.

A survey conducted by the current operators report the following data for annual operations: $\begin{tabular}{ll} \hline \end{tabular} \label{table_equation}$

Air Taxi 3216 Charters 265

The current operators report 10,275 enplonements at Scammon Boy for 2001.

See Table 1 for operators and aircraft using the Scammon Bay airport at this time.

Currently, Tanana Air operates a daily flight five days a week to Scammon Bay. Bell Air, Larry's Flying Service, and Flight Alaska, operate daily flights six days a week to Scammon Bay. Arctic Transportation Service and Arctic Circle Air operate daily flights three days a week to Scammon Bay. Era Aviation operates two daily flights six days a week to Scammon Bay. Hageland Air and Grant Air operate two daily flights six days a week and one daily flight one day a week. All Air Services deliver mail to Scammon Bay, except Yukon Aviation and Craig Air. Grant Air holds the medical contract. All Air Services fly to and from Bethel. Penn Air, Northern Air Cargo, and Evergreen International do not currently conduct any operations at the Scammon Bay airport nor do any of these operators plan to in the future. There are no aircraft based at

SCAMMON BAY AIRPORT NARRATIVE REPORT

See Table 2, for the forecast of future operations according to the survey conducted by the current operators. The projected future aircraft operations are based on current conditions for 5, 10, and 20 years into the future. These estimates are based on population forecasts, forecasts of current activity levels along with phone surveys of the carriers. The growth used for the Scammon Bay Airport is estimated at 3% a year (1.03^n where n equals the number of years). These parameters were considered to be a better predictor of the future activity than combining traditional forecasting parameters of the future operations with future aircraft.

D. Staged Development

Near-Term Development (0-5 years)

A grant was issued in 2003 to construct a one bay snow removal equipment building, its estimated cost is \$650,000.

Mid-Term Development (6-10 years)

There is no mid-term development plan for Scammon Bay Airport.

Long-Term Development (11-20 years)

To increase the existing runway dimensions to 100 feet by 4,000 feet. It is estimated to cost \$2,300,000 million in 2002 dollars.

E. <u>Desian Rationale</u>

1. Airport Reference Code (ARC)

The existing Airport Reference Code is A-II. There are a category A-I, A-II, and B-I aircraft operating on a regular basis at this facility and occasional use by B-II aircraft. There is occasional use by aircraft above A-II, but does not justify a higher ARC.

The most demanding aircraft to use the airport on a regular basis is the Piper Navajo. The Piper Navajo, a category B group I aircraft having an approach speed of 100 knots, wingspan of 40.7 feet, and a maximum take off weight of 6200 lbs. The Yukon Kuskokwim Transportation Plan assumes that the future demands of the community will require the use of a Dash B, which is a category A group III aircraft.

2. Wind Coverage

Currently, there is no wind data available for Scammon Bay. The wind data collected at Cape Romanzof, located 50 miles southwest from Scammon Bay, was used to perform wind coverage analysis. The existing runway 10-28 alignment provides 70.91% coverage for 13-knot crosswind component and 67.60% coverage for 10.5-knot crosswind component.

In 2001 FAA installed an AWOS at the Scammon Bay Airport. Currently, the system is operational for call up, but is not recording. FAA intends to start recording data by June 2004.

The crosswind runway will not be analyzed until wind data for Scammon Bay is available.

3. Runway and Taxiway

The existing runway length is 3,000 feet. The existing runway and taxiway width is designed to accommodate Group II aircraft.

The 2002 Yukon-Kuskokwim Delta Transportation Plan recommends that the Scammon Bay airport runway dimensions be increased to 4,000 feet by 100 feet in the long-term development plans.

Aprol

The existing Apron is 250 feet by 300 feet and is setback 250 feet from the runway. The apron design meets the recommended standards. Currently the apron contains an AWOS and one snow removal building with a rotating beacon. There will be a second snow removal building constructed next to the existing building in 2003. Currently aircraft tie—downs are

F. Property Status

The existing Scammon Bay Airport is operated by DOT & PF and is located on approximately 117 acres of land. A property plan has been included as part of this ALP.

G. Hazards to Navigation

The sewage lagoon in Scammon Bay is approximately 580 feet away from the runway. The solid waste disposal site is approximately 3,900 feet away from the existing runway & 3,200 feet from the ultimate runway. Both of sites are less than the recommended 5,000 feet. Correspondence with DEC shows there are no plans to relocate the sewage lagoon. A letter of non-objection was received by DEC for the solid waste disposal site from FAA on November 17, 1997. A wildlife hazard assessment will be requested prior to increasing runway dimensions.

H. Appendix 2 Obstructions

According to the information DOT & PF has there are no threshold siting surface object penetrations for runway 10/28. The Scammon Bay Airport meets the requirements for straight in night operations, although no surveys were performed to verify this.

Appendix 2 section e of paragraph 5 of the Airport Design AC is for approach end of runways expected to support instrument straight—in night operations. Requirements are that no object should penetrate a surface that starts 200 feet out from the threshold and slopes upward from the starting point at a slope of 20(horizontal) to 1(vertical). Additionally the surface extents laterally 400 feet on either side of the centerline.

I. Community Involvement

A copy of the Airport Layout Plan was sent to the community on February 10, 2003 for their review, comments were received November 2, 2003.

J. Madifications to Standards

The runway length is 3,000 feet. The recommended standard length for a community class runway is 3,300 feet.

K. Encroachments in Part 77 Surfaces

There are terrain obstructions on the south & west of the airport. The terrain penetrates the horizontal and conical surfaces to a maximum height of 1135 feet. The obstructions will not be removed.

L. Future Land Development

Property will be acquired on the east end of the runway for the 1,000—foot runway expansion.

	Table 1	" <u> </u>
COTTO A MAN	Operators and Aircraft Using Scammon Bay	
OPERATOR	AIRCRAFT	DESIGN GROUP
Bell Air	Piper Cherokee	
Alaska Central Express	Cessno 207	A-1
	Beech Airliner 1900	A-I
Tanana Air	Piper Saratoga	B-II
Craig Air	Cessno 172	A-1
	Cessno 172	A_I
	Cessno 207	A-I
Yukon Aviation		A-1
TOTAL TRIBUTA	Cessno 172	\\^A_I
Grant Air	Cessng 207	A-I
	Piper Novojo	B-I
	Cessno 208	A-II
Larry's Flying Service	Beech King Air	B-II
Lury's Hying Service	Cessna 207	A-i
	Cessna 172	B~II
	Piper Saratoga	A-I
	Piper Navajo	B-1
rcite Transportation Service	Cessno 207	A-I
	Cessna 402	B-JI
	Casa 212	A-II
Arctic Circle Air	Cessna 206	A-I
	Cessno 207	A-1
	Cessno 208	
	SC-7 Short Sky Van	<u>A-II</u>
Flight Alaska	Cessna 207	A-II
	Piper Navajo	A-I
	Casa 212	B-I
Village Aviation	Cessno 206	A-II
	Cessna 206	A-I
Hageland Aviation		A-I
	Cessna Grand Caravan	A-II
Era Aviation	Cessna F-406	8-(!
Cid Aviation	DHC-6 Twin Otter	A-II

Table 2 Forecast of Future Operations				
ITEM	Present	0 - 5 yrs	6 - 10 yrs	11 - 20 yrs
Total Annual Operations	3480	4034	4676	6285
Annual Enplanements Annual Scheduled Operations	10275	11911	13808	18557
Annual Non-Scheduled Operations Annual Non-Scheduled Operations	3215 265	3727	4320 356	5806 478

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED

By:

DATE:

DATE:

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL

By:

DATE:

DATE

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F.A.A. AIRSPACE REVIEW NUMBER: 03-AAL-18NRA

BY DATE REVISIONS

DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

CENTRAL REGION

PROVED:

DESIGN SECTION CHIEF

REV M. DOUTHIT, P.E.

PROJECT MANAGER

PROVED:

DESIGN SECTION CHIEF

REV M. DOUTHIT, P.E.

PROJECT MANAGER

PR

DATE 01/05/04

DESIGN JAR

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SCAMMON BAY AIRPORT

AIRPORT LAYOUT PLAN NARRATIVE REPORT 8 OF

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